

09696765 102500

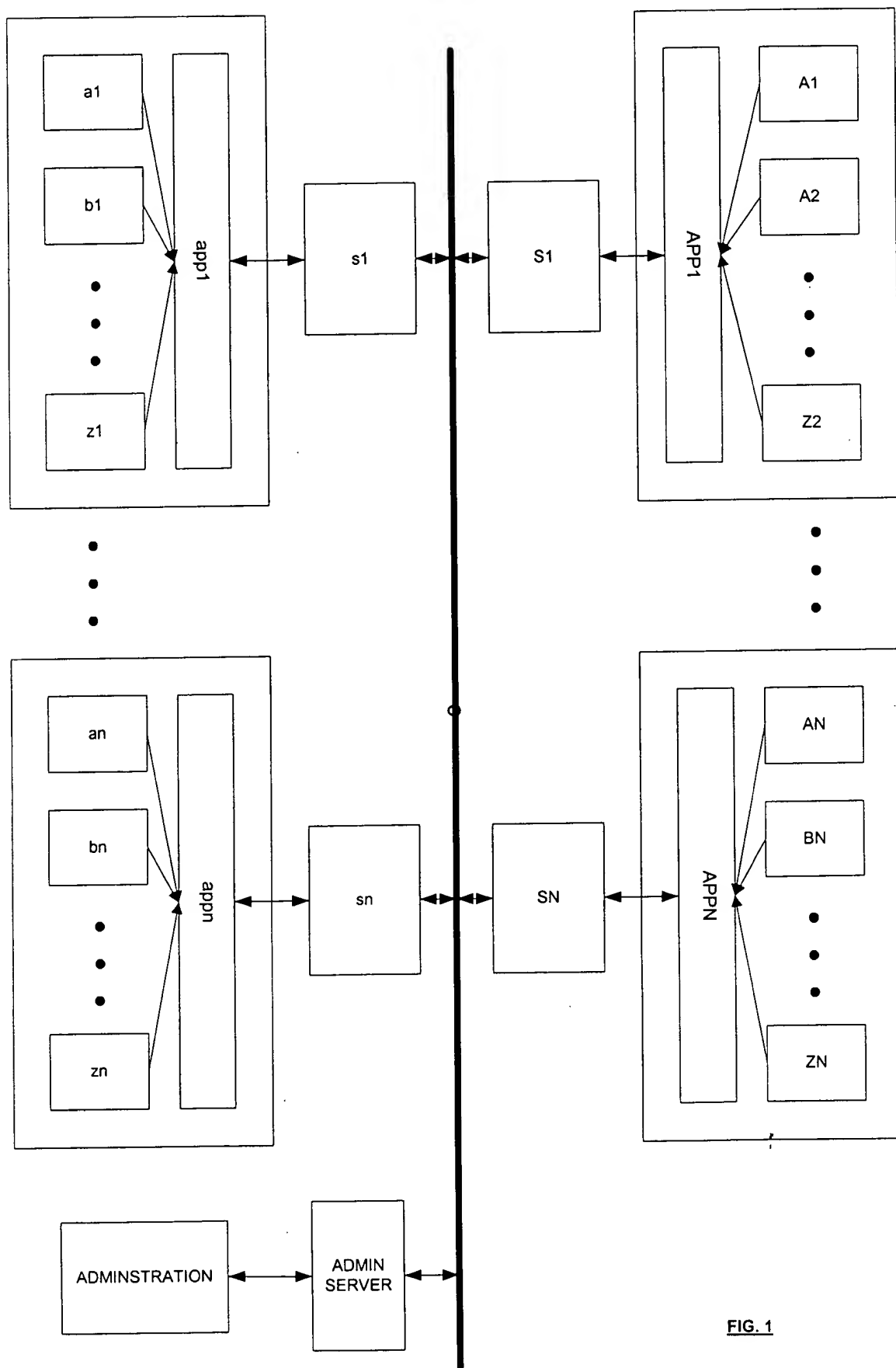


FIG. 1

09696765-102500

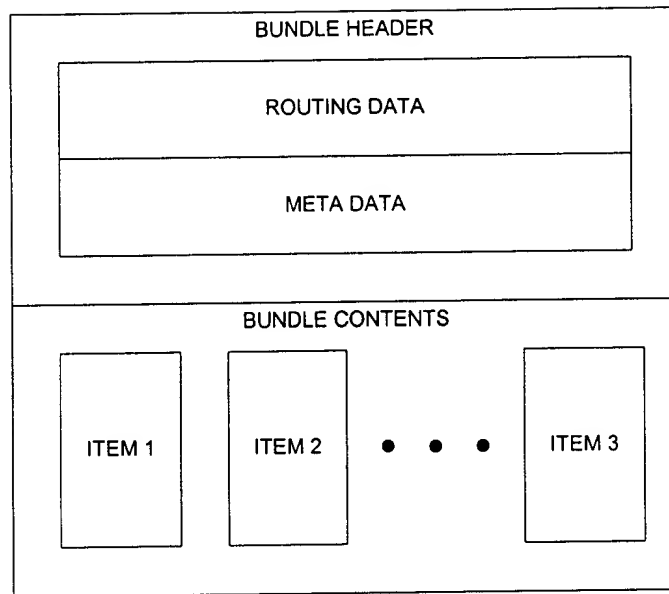


FIG. 2

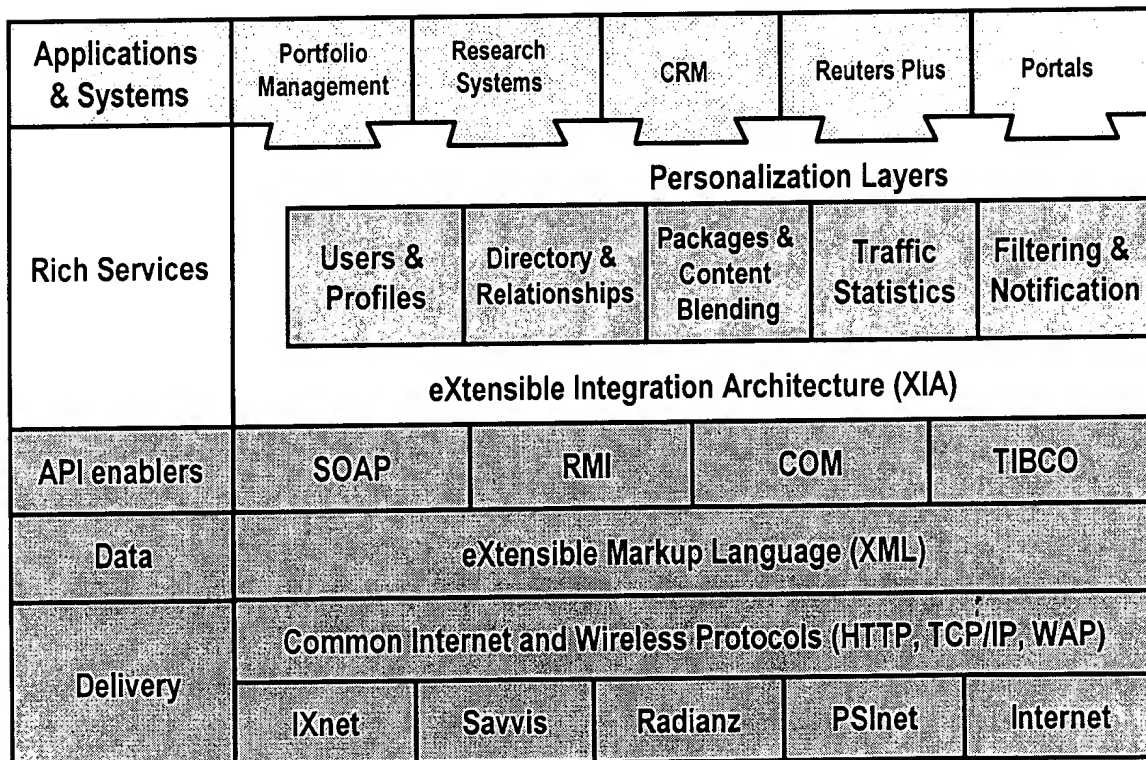


FIG. 3

095935-10500

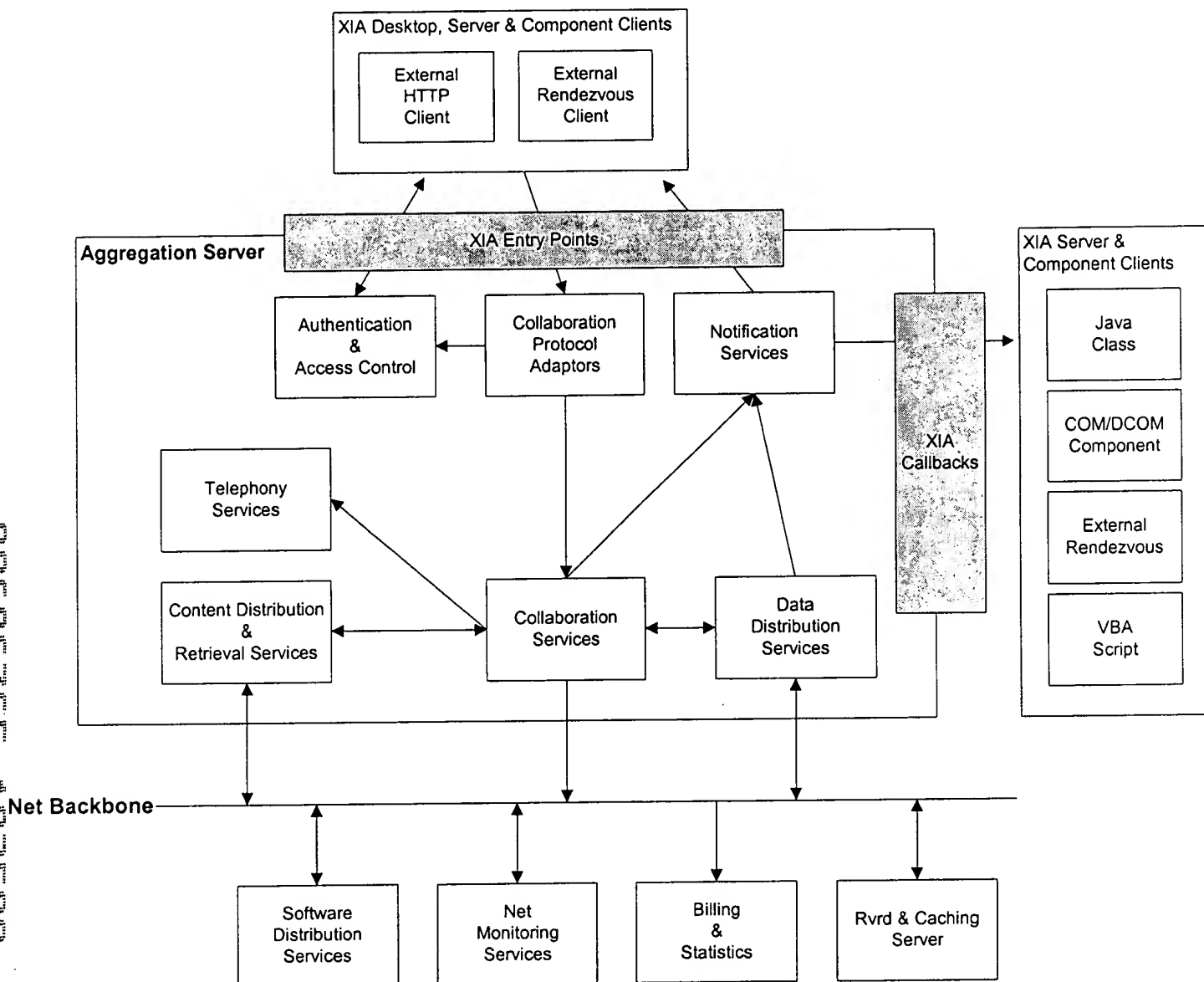


FIG. 4

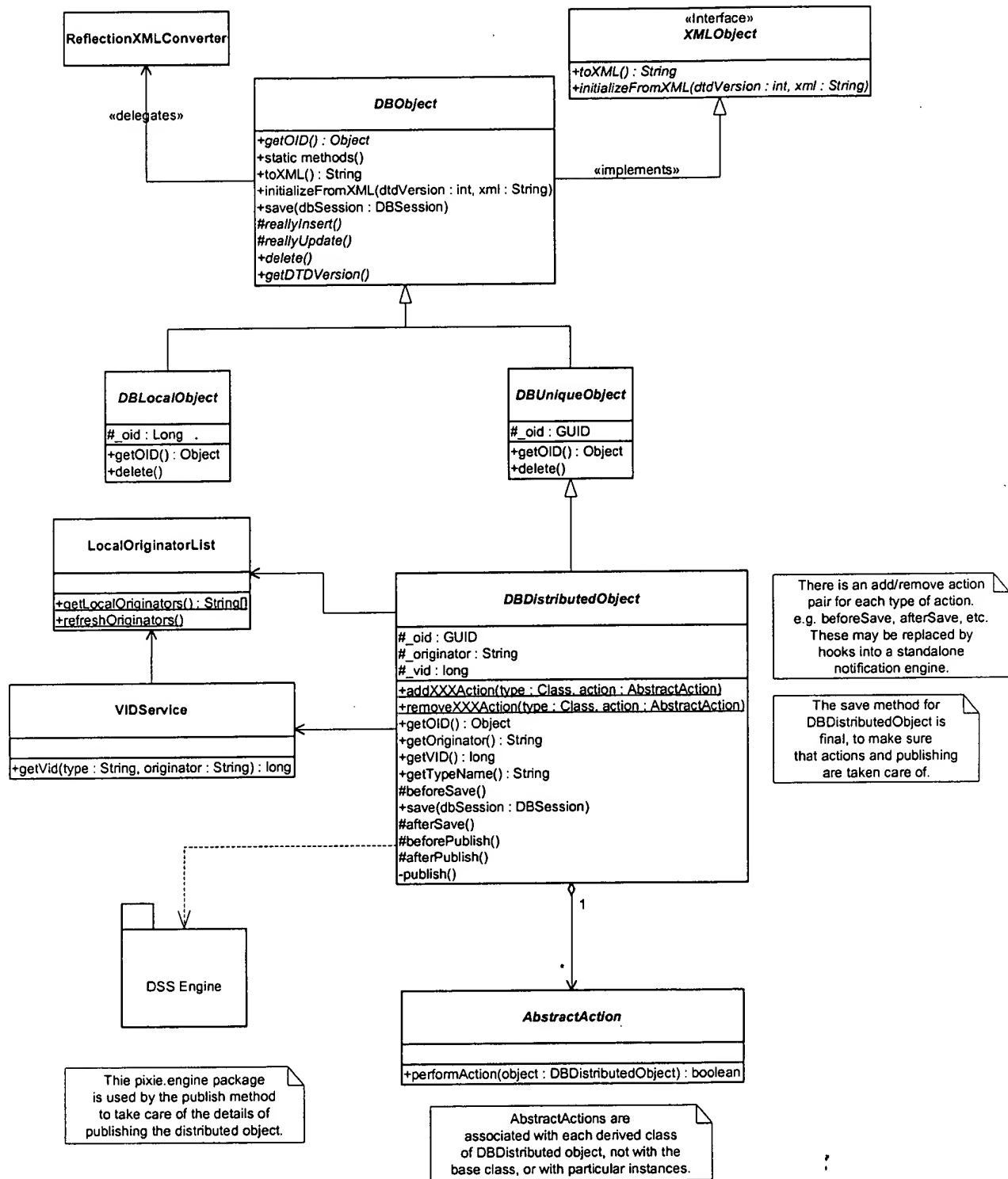
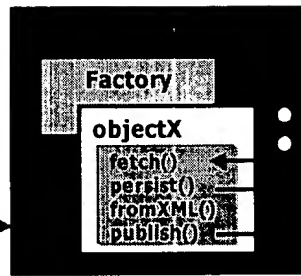


FIG. 5

1990



10

□ **Stored Procedures** write object data to the primary and auxiliary tables. Triggers on the primary table coordinate the retrieval and increment of a Version ID (VID).



**□ Object sends message to the Publication Service that a new version of the object is now available on this system. The Publication Service then begins the process of replication.**

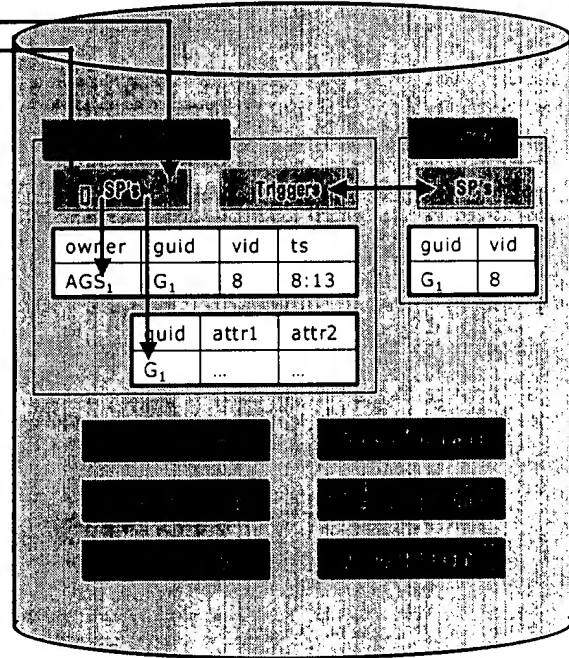


Fig. 6

**SECRET**

The diagram illustrates the sequence of operations for the Inbound Service Manager. It shows the flow of a message from a Publication Service to an Inbound Service Manager, which then stores it in a database and compares its VID against the expected VID for an object.

**Publication Service**

owner	guid	vid	ts
AGS <sub>1</sub>	G <sub>1</sub>	8	8:13

**Rendezvous**

**Inbound Service Manager**

owner	guid	vid	ts
AGS <sub>1</sub>	G <sub>1</sub>	8	8:13

**objectX**

**Retransmission Service**

**Sequence of operations:**

- Publication Service on AGS<sub>1</sub> sends out a Rendezvous message on an update to an existing object.
- Rendezvous message is broadcast to all aggregation servers.
- If the next expected VID was lower than the message received, the Inbound Service Manager would call the Retransmission Service to request all messages that have been missed.
- AGS<sub>2</sub> picks up the message and hands it to the Inbound Service Manager which stores it within the correct channel.
- This message is in sequence, so it is given to the App Engine to persist to the database.
- The new message's VID is compared against the next expected VID for that object to ensure it is in sequence.

The diagram illustrates the sequence of messages in the Retransmission Service. It shows the flow of data between the Inbound Service Manager, the Retransmission Service, and various AGS (Application Gateway Services) components.

**Top Section:**

- Retransmission Service:** Contains a **Retransmission Queue** with the following structure:
 

queue	msg	msg	msg	msg	msg
$Q_1$	$G_1 V_3$	$G_1 V_4$	$G_1 V_5$	$G_1 V_6$	$G_1 V_7$
$Q_2$	$G_1 V_3$	$G_1 V_4$			
- AGS<sub>1</sub>:** (the originator of the out of sequence update) receives the retransmission request from AGS<sub>2</sub> and builds a queue for retransmission.
- AGS<sub>2</sub>:** receives the out of sequence message.
- AGS<sub>3</sub>:** sends the same retransmission request after AGS<sub>1</sub> has broadcast the 2<sup>nd</sup> message in  $Q_1$ .

**Bottom Section:**

- Inbound Service Manager:** Contains a table with the following structure:
 

owner	guid	vid	ts
AGS <sub>1</sub>	$G_1$	8	8:13
- Retransmission Service:** Sends out a Rendezvous message requesting the missing updates.
- AGS<sub>1</sub>:** Sends out a Rendezvous message requesting the missing updates.
- AGS<sub>2</sub>:** Sends out a Rendezvous message requesting the missing updates.
- AGS<sub>3</sub>:** Sends out a Rendezvous message requesting the missing updates.

**Legend:**

- AGS<sub>1</sub>:** (the originator of the out of sequence update) receives the retransmission request from AGS<sub>2</sub> and builds a queue for retransmission.
- AGS<sub>2</sub>:** receives the out of sequence message.
- AGS<sub>3</sub>:** sends the same retransmission request after AGS<sub>1</sub> has broadcast the 2<sup>nd</sup> message in  $Q_1$ .

Fig. 8

09596765-102500

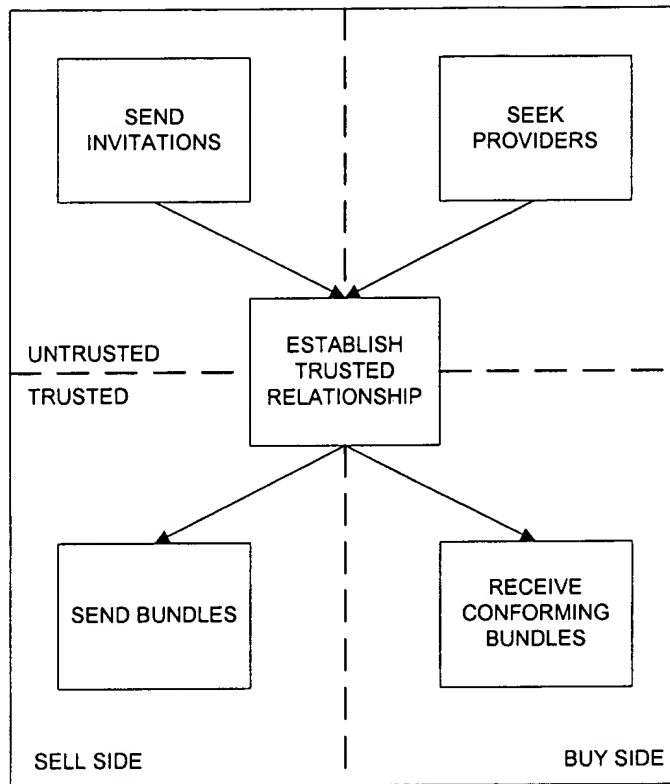


FIG. 9

New Package		
Trade Idea		100
9:53 K. Sullivan	JPMGN	
AOL - Reiterate Buy, this stock can do no wrong!		
AOL, CMGI, SFE, ICFE, XLA		

FIG. 10



FIG. 11

005207" 59/96960

WorldStreet Net Inbox						
Inbox						
Received	Package Type	Ticker(s)	Headline	Author	Firm	Delete
10:14 09/13/00	Lowered	OOP	Office Depot - Mid Outperform to Perform	C. Harper	JP Morgan	<input checked="" type="checkbox"/>
16:21 09/13/00	Trade Idea	RTR L	Blue Horseshoe loves Reuters based on WorldStreet deal.	G. Gecko	Gecko	<input checked="" type="checkbox"/>
10:11 09/13/00	Internal Comment	QCOM	Mid-Day Trading Comment	V. Lalev	American Century	<input type="checkbox"/>
13:42 09/13/00	Estimates Increased	DCLK	DoubleClick - Revising estimates on market softness	D. Hingis	ABN-AMRO	<input type="checkbox"/>
10:46 09/13/00	Reiterate Rating	AOL	AOL - Reiterate Buy, this stock can do no wrong!	K. Sullivan	JP Morgan	<input checked="" type="checkbox"/>
09:52 09/13/00	Buy	AOL	AOL - Looks like a little rally for today!	L. Harvey	CSFB	<input type="checkbox"/>
10:02 09/13/00	Note	ACTI, AOL, ARPT, CIEN	Technology & Telecom Weekly	J. Russell	CSFB	<input type="checkbox"/>
00:06 09/13/00	Note		Light week on Economic Calendar	R. Diaz	JP Morgan	<input type="checkbox"/>
11:08 09/13/00	Internal Comment	AAPL	Apple is under fire!!	S. Leclair	American Century	<input type="checkbox"/>
10:25 09/13/00	Analyst Event	CMGI	2Q Results	K. Sullivan	JP Morgan	<input type="checkbox"/>
10:44 09/13/00	Company Update	CMGI, SFE, KGE, XLA	Internet Holding Companies - Setcor Update	R. Hicks	ABN-AMRO	<input type="checkbox"/>
10:45 09/13/00	Recommendation	CMGI	CMGI - Down but not out for the count!	C. Harper	JP Morgan	<input type="checkbox"/>
13:55 09/13/00	Estimates Increased	AOL	AOL - Increasing our estimates from \$0.09 to \$0.11	R. Diaz	JP Morgan	<input type="checkbox"/>
10:01 09/13/00	Research	AOL, AMAT, ACSCO	U.S. Strategy Call	B. Shee	ABN-AMRO	<input type="checkbox"/>

FIG. 12

WorldStreet Net Inbox						
Inbox						
Received	Package Type	Ticker(s)	Headline	Author	Firm	Delete
(none)						
00:06 09/13/00	Note		Light week on Economic Calendar	R. Diaz	JP Morgan	<input type="checkbox"/>
+ AAPL (1)						
+ ACTI (1)						
+ AKAM (1)						
+ AOL (6)						
+ ARPT (1)						
+ CIEN (1)						
+ CMGI (5)						
10:25 09/13/00	Analyst Event		2Q Results	K. Sullivan	JP Morgan	<input type="checkbox"/>
10:44 09/13/00	Company Update		Internet Holding Companies - Setcor Update	R. Hicks	ABN-AMRO	<input checked="" type="checkbox"/>
09:20 09/13/00	Internal Comment		CMGI - Today's Conference Call Highlights	S. Kraft	American Century	<input type="checkbox"/>
10:45 09/13/00	Recommendation		CMGI - Down but not out for the count!	C. Harper	JP Morgan	<input type="checkbox"/>
09:24 09/13/00	In-Line Results		CMGI reports in line with out - \$0.74 estimates	R. Constantine	CSFB	<input type="checkbox"/>

FIG. 13



09:59:59 "59/96960

WorldStreet Net Outbox						
Outbox		Create		Retract		No Grouping
Sent	Recipient	Package Type	Ticker(s)	Headline	Status	Retract
09:49 12/30/99	F. Cucci	Buy	MCHP	Microchip Tech, the breakout us just beginning	Under Review	<input checked="" type="checkbox"/>
09:38 12/30/99	T. Angers	Buy	CSCO	Cisco strong regardless of current market conditions; Buy the dips	Under Review	<input type="checkbox"/>
09:33 12/30/99	B. Simon, N. Voutsakis	Buy	CSCO, JDSU	JDSU looking like Cisco Part II	Under Review	<input checked="" type="checkbox"/>
09:29 12/30/99	D. Riley	Internal Comment	CMGI	CMGI - Today's Conference Call Highlights	Released	<input type="checkbox"/>
09:21 12/30/99	G. Tull	In-Line Results	CMGI	CMGI reports in line with out - \$0.74 estimates	Under Review	<input checked="" type="checkbox"/>
09:21 12/30/99	K. Andurs, A. Gibson Note			Light week on Economic Calendar	Released	<input type="checkbox"/>
09:20 12/30/99	J. Constantine	Estimates Increased	DCLK	DoubleClick - Revising estimates on market softness	Released	<input type="checkbox"/>
09:15 12/30/99	A. Osman	Analyst Event	WMT	Department Stores: Major Issues Facing the Industry	Released	<input checked="" type="checkbox"/>
09:10 12/30/99	T. Bremner	Estimates Increased	AOL	AOL - Increasing our estimates from \$0.09 to \$0.11	Released	<input type="checkbox"/>
08:55 12/30/99	T. Miller, W. Barker, E. Burke, M. Cooley	Internal Comment	AOL	Does anyone know how has been unloading today?	Under Review	<input type="checkbox"/>
08:45 12/30/99	C. Murray, B. Weber	Conference	LU, SCMR, AKAM,	Telecom and Data Infrastructure Conference	Released	<input type="checkbox"/>
17:56 12/30/99	P. Moriarty	Buy	AOL	AOL - Looks like a little rally for today!	Released	<input checked="" type="checkbox"/>
16:49 12/30/99	A. Cooper	Internal Comment	HLTH	Quintiles acquisition completed - should hit the tape shortly.	Released	<input type="checkbox"/>
16:17 12/30/99	J. Wilson, T. Ragsdale, B. Cook	Research	AOL, AMAT, ACSCO,	U.S. Strategy Call	Released	<input checked="" type="checkbox"/>
15:49 12/30/99	A. Corman & Note		ACTI & NY	Technology & Telecom Weekly	Released	<input type="checkbox"/>
# of Packages		3:58 PM				

FIG. 14

G. Gecko: RTRL

View Package
Reply
Forward
Close

Gordon R. Gecko  
President & CEO  
Tel: (212) 653-2163  
Fax: (212) 653-2504  
Email: ggecko@gecko.com

Received: 9/12/00 12:25 PM EST  
Tickers: RTRL  
Sectors: E-Commerce B2B, Media, Financial Services

Package Type: Trade Idea  
Headline: Blue Horseshoe loves Reuters based on WorldStreet deal.  
URL: <http://www.gecko.com/privateclients/hotreports.asp?WorldStreet>

Message Text:

Alexis  
Blue Star loves RTRL. We hear they are doing a deal with WorldStreet by which Reuters terminals will be enabled to access WorldStreet Net, an infrastructure for collaborative communications for the Financial Industry.  
I think this could be a killer partnership for both Reuters and WorldStreet!  
Gorden.

Region: North America  
Country: USA

Attachments:

Reuters Model Analyst Report

FIG. 15

005207" 59495950

**Create Package Tester** [Icons]

Create/Forward/Reply Send Cancel

Package Type: cboPackageType

To: txtRecipients

☐ Disable Forwarding

Tickers: txtTickers

Sectors: txtSectors

Regions: txtRegions Countries: txtCountries

Headline FwdRe: txtHeadline

txtContents

Packages (2)  
Headline 1

VoiceMail (1) Documents (2)  

Add Voicemail  
Voice Mail 1

Add Document  
Document2  
Document1

FIG. 16

**WorldStreet Net Invitations** [Icons]

Invitations: [Create] [Accept] [Decline] [View Received]

Received	Author	Firm	Note	
Oct-01-00 09:45 am	T. Bremner	Jefferies Securities	Offering new coverage on 6 hot biotech stocks	<input checked="" type="checkbox"/>
Sep-28-00 10:24 am	A. Kopits	Paine Webber	Discover a new earnings model	<input type="checkbox"/>
Sep-27-00 01:16 pm	T. Murphy	Janus	Would you like to collaborate?	<input checked="" type="checkbox"/>
Sep-26-00 05:22 pm	P. Hild	LPL Financial	Initiating coverage on 3 new stocks	<input type="checkbox"/>
Sep-26-00 02:19 pm	J. Lennon	Goldman Sachs	Low rates for bulk trades - we want your business	<input type="checkbox"/>
Sep-24-00 09:28 am	W. Jobs	Bancorp	Initiating new coverage in emerging markets	<input type="checkbox"/>

# of Invitations: 5:03 PM

FIG. 17

WorldStreet Net Invitations						
Invitations				Create	Revoke	View Replies
Received	Recipient	Firm	Note	Status	Revoke	
Oct-02-00 10:56 am	J. Constantine	JP Morgan	Do you cover any of these: AOL, CMGI, XLA?	Pending	<input checked="" type="checkbox"/>	
Oct-01-00 09:16 am	B. Fador	CSFB	Looking for information on companies building DNA chips	Pending	<input type="checkbox"/>	
Sep-28-00 10:18 am	T. Brenner	LPL Financial	Offering new coverage in emerging markets.	Declined	<input type="checkbox"/>	
Sep-27-00 04:18 pm	J. Green	Jefferies Securities	Offering new coverage on P2P financials systems.	Pending	<input type="checkbox"/>	
Sep-27-00 03:34 pm	J. Nixon	JP Morgan	We have new modeling analysts that I'd like to hook you up with.	Accepted	<input type="checkbox"/>	
Sep-27-00 03:34 pm	J. Berlin	Pulham	Hi Jacob, I wanted to invite you to WS Net. It's easy to share stuff.	Pending	<input checked="" type="checkbox"/>	
Sep-26-00 12:05 pm	B. Shatner	Fidelity	Hey Bill, let me know if you get this. We can share tips.	Pending	<input type="checkbox"/>	
Sep-23-00 10:05 am	K. Martinez	Warburg Dillon Reed	I'd like to offer you our commentary on a wide range of sectors. Please accept.	Accepted	<input type="checkbox"/>	
Sep-22-00 01:24 pm	S. Patel	Credit Suisse Boston	Welcome to the WorldStreet Net!	Declined	<input type="checkbox"/>	
Sep-21-00 12:15 pm	C. Young	ABN-AMRO	Offering new coverage in emerging markets.	Pending	<input type="checkbox"/>	

FIG. 18

New Invitation

New Invitation

Find User

Browse Net

Subject: We are excited to offer you free access to our research

Send Cancel

FIG. 19

09696765-102500

09696755-102500

The screenshot shows a web application window titled "TestForm". Inside, there's a header "WS Net Directory". Below this, a sidebar on the left contains a "WS Net" section with a dark, textured area, and a list of links: "My Relationships", "My Contact Lists", and "Non-Relationships". The main content area has a table with two columns: "Name" and "Title". Above the table, there are links for "Details" and "Invite". At the bottom of the main area, it says "# of individuals".

FIG. 20


The screenshot shows a web page titled "WorldStreet Net Directory" with a sub-header "WorldStreet Net People Finder". Below the header, there's a text input field with the placeholder text "Enter the full or partial first or last name of WorldStreet net user you are looking for." and a "Go" button. The main content area is empty.

FIG. 21

**Details** X

**Details for Gordon R. Gecko (Gecko Industries)**

Business Card | **Interests** | Contact Lists | Packages Sent | Packages Received



**Gordon R. Gecko**  
 President & CEO  
 Tel: (212) 653-2163  
 Fax: (212) 653-2504  
 Email: grgecko@gecko.com

**Personal Description:**  
 Graduated from Oxford in 1982. Masters in finance in 1992. I am a thought leader in the firm for wireless and internet technologies.

Voted in top 5 European fund managers 3 years running.

☐ Accept all packages from Gordon Gecko

End Relationship | Invite

Close

FIG. 22

**Details** X

**Details for Gordon R. Gecko (Gecko Industries)**

Business Card | **Interests** | Contact Lists | Packages Sent | Packages Received

**Sectors:**

Computer Hardware, Computer Software, Silicon Chip

**Regions:**

North America

**Countries:**

USA

**Tickers:**

IBM, DELL, FORR, INTL, SUNW, T, R, QQQ, RTRS, ADVS

Close

FIG. 23

WorldStreet Net Statistics

Most Active

Top Tickers

Top Sectors

Top Authors

Top Firms

Most Active Tickers

Last 24 Hours

Clicked by All WSNet

Show Top 10

Close

Rank	Author	Packages	Clicks	Ratio
1	L. Harvey	123	2302	80%
1	D. Hingis	89	2092	16%
1	S. Kraft	132	2032	23%
1	C. Harper	142	1982	76%
1	W. Ballmer	24	1682	86%
1	G. Gecko	67	1873	49%
1	J. Russell	87	1622	77%
2	J. Russell	155	1362	24%
2	R. Diaz	73	1322	71%
3	D. Hingis	22	1098	48%
3	R. Diaz	85	1202	22%
3	S. Leclair	17	1065	76%
4	K. Sullivan	62	982	47%
4	C. Harper	49	941	81%
5	R. Hicks	38	873	75%
6	H. Carpenter	91	865	78%
6	K. Sullivan	25	821	65%
6	V. Lalev	12	787	98%
7	B. Shea	18	745	43%
7	S. Shea	38	714	12%
8	P. Henderson	72	563	9%
9	D. Medelson	43	493	65%
9	S. Leclair	32	451	72%
9	R. Constantine	39	445	12%
10	S. Fitzpatrick	98	1402	13%
10	R. Constantine	60	1520	62%

Publication

Coverage Gap

7:54 PM

7:54 PM